

The 1900/25 Vibration Monitor:

Continuous monitoring for the rest of the machines in your facility

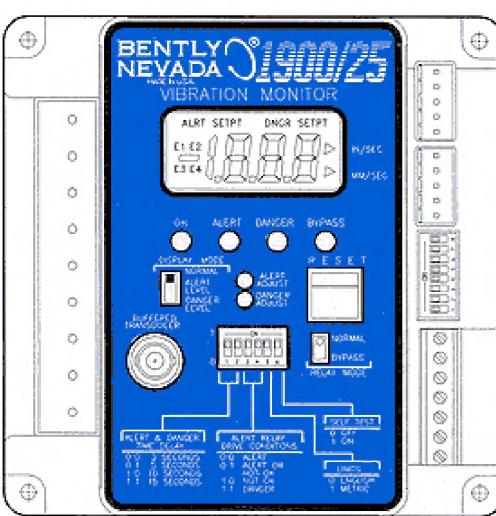
With over twenty different monitors available for your continuous monitoring applications, Bently Nevada's 3300 System has quickly become the new standard in monitoring large, complex rotating machinery. However, it may be difficult to justify this type of continuous monitoring for less critical, essential and general-purpose machinery. Consequently, these machines may be operating without adequate machinery protection.

We are proud to introduce the 1900/25 Vibration Monitor, specifically designed to continuously monitor essential and general-purpose machinery at a justifiable price.

The 1900/25 is a single-channel monitor with two single-pole, double-throw relay contacts and digital LCD display. It accepts input from our low-cost 89129 Accelerometer and integrates the signal into peak velocity units. The 1900/25 Monitor includes many of the time-proven features available in other Bently Nevada monitors such as: Timed OK/Monitor Defeat, circuit fault detection/indication, programmable options, buffered transducer signal output and a relay BYPASS switch. These allow the 1900/25 to be used in many different monitoring applications without sacrificing reliability.

Inexpensive AND reliable

Environmental concerns and the industry trend to *do more with less* have dramatically increased the need to detect and diagnose problems on all types of rotating machinery. Until now, the only available solutions for smaller,



environmentally-critical machines have been to initiate a periodic predictive maintenance program or to install a vibration switch. The 1900/25 is a better solution because it provides reliable, continuous monitoring at a cost comparable to a vibration switch.

The 1900/25 System is designed to be installed near the machine. Unlike a vibration switch, only the transducer must be installed on the machine. The monitor can be installed up to 100 ft. (30.5 metres) away in a safer location where it can be easily read by your service personnel.

This creates two distinct advantages: First, the accelerometer can be mounted directly to the machine casing. This eliminates the need to weld a bracket to the bearing housing in order to install a vibration switch. Second, system reliability is increased. The monitor can be located in an area less harmful to electronic components.

Trendmaster® 2000 Interface

Although vibration amplitude can be used quite effectively to detect impending machinery problems, it provides little information about the root cause(s) of the vibration. For this reason, an interface to our Trendmaster® 2000 System is built into the 1900/25.

The Trendmaster® 2000 automatically collects condition data from over 2000 machine points. These can range from vibration transducers to process inputs (temperature, speed, flow, etc.). Its patented communication process drastically reduces installation costs compared to other permanently-installed systems. When used with the 1900/25, Trendmaster® 2000 Software can directly access the monitor's dynamic transducer signal. If an alarm condition is detected, dynamic data presentations (i.e. Timebase Waveform, Spectrum or Spectra versus Time) can be used to perform on-line diagnostics at the host computer. Maintenance personnel are then better informed of possible problems before going out to the machine for further investigation.

Since the host computer is the *brains* of a 1900/Trendmaster® 2000 System, additional points can be added at a very reasonable cost. System reliability is also increased because only the input devices (1900 Monitors or Transducer Interface Modules) are located out in your plant. The host computer resides in a control room, for example, where it can provide useful information and access to many different data points.

For those who require monitored values to be displayed on a Distributed Control System, new Trendmaster® 2000 DCS Interface Software (described on page 22) can provide the information you need. With this software, vibration levels measured by 1900/25 Vibration Monitors can be passed through the Trendmaster® 2000 and into your DCS. These levels can be stored with other process files or reviewed by your operations personnel on their DCS terminal. ■